





MS437015

# MIRACLE MIX - POWDER

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## SECTION 6 - HEALTH HAZARD DATA and FIRST AID INFORMATION - continued

ROUTES OF ENTRY: Inhalation  Skin  Ingestion

**HEALTH HAZARD (Acute and Chronic):** Contains silica glass, which is considered a hazard by inhalation. IARC has classified it as a probable carcinogenic for humans. Dusts of silica glass is also a known cause of silicosis, a non-cancerous lung disease.

**SIGNS AND SYMPTOMS OF OVEREXPOSURE:** Irritation and soreness in throat and nose.

**CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:** May aggravate preexisting upper respiratory and lung disease.

### EMERGENCY FIRST AID PROCEDURES:

**INHALATION:** Remove to fresh air, drink water to clear throat and blow nose to evacuate dust.

**INGESTION:** Ingestion may require medical assistance.

**SKIN:** Wash with soap and water.

**EYES:** Flush with large quantities of water. If irritation develops or persists seek medical attention.

## SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE

**IN CASE OF RELEASE OR SPILL:** Avoid generating dust while sweeping. If an excessive amount of dust is generated use a filter equipped vacuum and MSHA/NIOSH approved mask.

**WASTE DISPOSAL METHOD:** In accordance with local, state and federal regulations.

**STORAGE, HANDLING, AND SPECIAL PRECAUTIONS:** Store at normal room temperatures and humidity.

## SECTION 8 - CONTROL MEASURES

**RESPIRATORY PROTECTION:** Minimize exposure to dust in accordance with good hygiene practice. If needed, use MSHA-NIOSH approved respirator for dusts, mists and fumes.

**VENTILATION:** Local Exhaust: Yes Mechanical: Yes Special: N.A. Other: N.A.

**PROTECTIVE GLOVES:** Disposable vinyl gloves recommended.

**EYE PROTECTION:** Safety glasses

**OTHER PROTECTIVE CLOTHING OR EQUIPMENT:** Eyewash station

**WORK/HYGIENIC PRACTICE:** Follow safe hygiene practices.

## SECTION 9- PREPARATION INFORMATION

*This data is supplied to comply with OSHA Hazard Communication Standard 29 CFR 1910,1200 and W.H.M.I.S. CPR*

**DATE:** 08 January 2009

**REVIEWED:** 26 January 2009

N.A. = NOT APPLICABLE  
N.E. = NOT ESTABLISHED

*The information herein is given in good faith but no warranty expressed or implied is made.*

FIRE – 0

TOXICITY – 1

NFPA  
REACTIVITY – 0

SPECIAL –

**MIRACLE MIX - LIQUID**  
**MATERIAL SAFETY DATA SHEET****SECTION 1 - SOURCE/IDENTITY/USE INFORMATION****MANUFACTURER**

GC AMERICA INC.  
3737 West 127th St.  
Alsip, Illinois, 60803  
Telephone: 708-597-0900  
Hours: Mon.- Fri. 8:00 am. - 5:00 pm. C.S.T.  
Transportation Emergency Telephone No. 800-424-9300

**COMMON NAME:** MIRACLE MIX-LIQUID  
MIRACLE MIX CAPSULES - LIQUID

**CHEMICAL NAME:** N.A.

**PRODUCT USE:** Dental composite filling material - liquid component

*The following information is provided with regard to the toxicity and hazards of the pure components present in this portion of the unmixed powder/liquid system.*

**SECTION 2 - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION**

COMPONENT	C.A.S.	EXPOSURE LIMITS	LD50/LC50	%
Polyacrylic acid	Not listed	TWA=10ppm (ACGIH)	LD50=2500mg/kg (oral rat) LC50=N.E.	40-50
Proprietary Ingredient		TLV=10mg/m <sup>3</sup> PEL=15mg/m <sup>3</sup>	N.E.	5-15

**SECTION 3 - PHYSICAL/CHEMICAL PROPERTIES**

**BOILING POINT:** 101°C  
**VAPOR PRESSURE:** N.E.  
**VAPOR DENSITY:** N.E.  
**SOLUBILITY IN WATER:** N.E.  
**COEFFICIENT OF OIL/WATER DISTRIBUTION:** N.E.  
**liquid**

**SPECIFIC GRAVITY (H<sub>2</sub>O = 1):** 1.18  
**MELTING POINT:** 13°C  
**EVAPORATION RATE:** N.E.  
**ODOR THRESHOLD:** N.E.  
**APPEARANCE AND ODOR:** Colorless, slightly viscous and odorless

**SECTION 4 - FIRE AND EXPLOSION DATA**

**FLASH POINT:** Not flammable

**FLAMMABLE LIMITS:** N.A.

**EXTINGUISHING MEDIA:** Alcohol foam

**SPECIAL FIRE FIGHTING PROCEDURES:** Full protective clothing and self-contained breathing apparatus.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** None

**HAZARDOUS COMBUSTION PRODUCTS:** Emits Acrid smoke when heated beyond boiling point.

**SECTION 5 - REACTIVITY DATA**

**STABILITY:** Stable  Unstable   
**POLYMERIZATION:** Will Not Occur  Will Occur

**CONDITIONS TO AVOID:** High heat

**INCOMPATIBILITY (Materials to Avoid):** Alkali will inactivate product

**HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:** N.E.

**SECTION 6 - HEALTH HAZARD DATA and FIRST AID INFORMATION**

	YES	NO	NE	NA	NTP	IARC	OSHA	OTHER
MUTAGENIC AFFECTS		X						
TERATOGENIC AFFECTS		X						
REPRODUCTIVE TOXIN		X						
CARCINOGENICITY		X						
SENSITIZER		X						

ROUTES OF ENTRY: Inhalation  Skin  Ingestion 

HEALTH HAZARD (Acute and Chronic): Acidic solution (pH=1.90), avoid contact with skin or eyes.

SIGNS AND SYMPTOMS OF OVEREXPOSURE: N.E.

CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: N.E.

**EMERGENCY FIRST AID PROCEDURES:****INGESTION:** Do not induce vomiting - give large volumes of water. Seek medical attention.**SKIN:** Wash with soap and water. If irritation develops seek medical attention.**EYES:** Flush with water for 15 minutes. If irritation develops seek medical attention.**SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE****IN CASE OF RELEASE OR SPILL:** Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Ensure adequate ventilation.**WASTE DISPOSAL METHOD:** Dilute with water and flush into drain with large volumes of water.**STORAGE, HANDLING, AND SPECIAL PRECAUTIONS:** Store in a cool dry place in tightly closed container.**SECTION 8 - CONTROL MEASURES****RESPIRATORY PROTECTION:** None required**VENTILATION:** Local Exhaust: N.A. Mechanical: N.A. Special: N.E. Other: N.A.**PROTECTIVE GLOVES:** Latex gloves are recommended**EYE PROTECTION:** Goggles or full face shield**OTHER PROTECTIVE CLOTHING OR EQUIPMENT:** Do not spill on clothing. Eyewash station**WORK/HYGIENIC PRACTICE:** N.E.**SECTION 9 - PREPARATION INFORMATION***This data is supplied to comply with OSHA Hazard Communication Standard 29 CFR 1910,1200 and W.H.M.I.S. CPR***DATE:** 08 January 2009**REVIEWED:** 26 January 2009**REVISED:** 23 September 2009

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FIRE - 0

TOXICITY - 1

NFPA  
REACTIVITY - 0

SPECIAL - ACID

**MIRACLE MIX - ALLOY**  
**MATERIAL SAFETY DATA SHEET****SECTION 1 - SOURCE/IDENTITY/USE INFORMATION****MANUFACTURER**

GC AMERICA INC.  
3737 West 127th St.  
Alsip, Illinois, 60803  
Telephone: 708-597-0900  
Hours: Mon.- Fri. 8:00 am. - 5:00 pm. C.S.T.  
Transportation Emergency Telephone No. 800-424-9300

**COMMON NAME:** MIRACLE MIX - ALLOY**CHEMICAL NAME:** N.A.**PRODUCT USE:** Reinforced glass ionomer crown/core material - alloy component

*The following information is provided with regard to the toxicity and hazards of the pure components present in this portion of the unmixed powder/liquid system.*

**SECTION 2 - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION**

COMPONENT	C.A.S.	EXPOSURE LIMITS	LD50/LC50	%
Silver metal	7440-22-4	TWA = 0.1 mg/m <sup>3</sup>	N.E.	56
Tin metal	7440-31-5	TWA = 2 mg/m <sup>3</sup>	N.E.	29
Copper metal	7440-50-8	TWA = 0.2 mg/m <sup>3</sup> (ACGIH)	LD50=N.A. LC50=N.E.	15

**SECTION 3 - PHYSICAL/CHEMICAL PROPERTIES**

<b>BOILING POINT:</b> 1287.8°C	<b>SPECIFIC GRAVITY (H2O = 1):</b> N.E.
<b>VAPOR PRESSURE:</b> N.E.	<b>MELTING POINT:</b> 587.8°C
<b>VAPOR DENSITY:</b> N.E.	<b>EVAPORATION RATE:</b> N.E.
<b>SOLUBILITY IN WATER:</b> Insoluble	<b>ODOR THRESHOLD:</b> N.E.
<b>COEFFICIENT OF OIL/WATER DISTRIBUTION:</b> N.E.	<b>APPEARANCE AND ODOR:</b> Very fine gray powder

**SECTION 4 - FIRE AND EXPLOSION DATA****FLASH POINT:** N.A.**FLAMMABLE LIMITS:** N.A.**EXTINGUISHING MEDIA:** Material is not combustible. However, air-borne dust mixed with sufficient air is flammable if flame is present. Use extinguishing media appropriate to the surrounding area.**SPECIAL FIRE FIGHTING PROCEDURES:** Full protective clothing face mask and self contained breathing apparatus.**UNUSUAL FIRE AND EXPLOSION HAZARDS:** Air-borne dust is flammable**HAZARDOUS COMBUSTION PRODUCTS:** Carbon dioxide, carbon monoxide, toxic metallic oxides**SECTION 5 - REACTIVITY DATA**

**STABILITY:** Stable  Unstable   
**POLYMERIZATION:** Will Not Occur  Will Occur

**CONDITIONS TO AVOID:** Avoid high temperatures and humidity**INCOMPATIBILITY (Materials to Avoid):** Ammonium nitrate, bromates and all halogen salts**HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:** N.E.**SECTION 6 - HEALTH HAZARD DATA and FIRST AID INFORMATION**

	YES	NO	NE	NA	NTP	IARC	OSHA	OTHER
<b>MUTAGENIC AFFECTS</b>		X						
<b>TERATOGENIC AFFECTS</b>		X						
<b>REPRODUCTIVE TOXIN</b>		X						
<b>CARCINOGENICITY</b>		X						
<b>SENSITIZER</b>		X						



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# MIRACLE MIX - ALLOY

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## SECTION 6 - HEALTH HAZARD DATA and FIRST AID INFORMATION - continued

ROUTES OF ENTRY: Inhalation  Skin  Ingestion

**HEALTH HAZARD (Acute and Chronic):** Can be absorbed through the skin. While not reported as toxic will cause permanent black coloration at the skin contact sites. Dust may cause a form pneumoconiosis which is relatively benign. Inhalation of copper dust has been reported to cause hemolysis of red blood cells.

**SIGNS AND SYMPTOMS OF OVEREXPOSURE:** N.E.

**CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:** N.E.

### EMERGENCY FIRST AID PROCEDURES:

**INHALATION:** Remove to fresh air, drink water to clear throat and blow nose to evacuate dust.

**INGESTION:** Seek medical assistance

**SKIN:** Wash with soap and water.

**EYES:** Flush with large quantities of water. If irritation develops or persists seek medical attention.

## SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE

**IN CASE OF RELEASE OR SPILL:** Avoid generating dust during clean up. Wear protective clothing as noted in section 8. If dust is generated use a filter equipped vacuum and MSHA/NIOSH approved mask.

**WASTE DISPOSAL METHOD:** In accordance with local, state and federal regulations.

**STORAGE, HANDLING, AND SPECIAL PRECAUTIONS:** Store at room temperature and humidity.

## SECTION 8 - CONTROL MEASURES

**RESPIRATORY PROTECTION:** Minimize exposure to dust in accordance with good hygiene practice. If needed, use MSHA-NIOSH approved respirator for dusts, mists and fumes.

**VENTILATION:** Local Exhaust: Yes Mechanical: Yes Special: N.A. Other: N.A.

**PROTECTIVE GLOVES:** Disposable vinyl gloves recommended.

**EYE PROTECTION:** Safety glasses

**OTHER PROTECTIVE CLOTHING OR EQUIPMENT:** Eyewash station

**WORK/HYGIENIC PRACTICE:** Follow safe hygiene practices.

## SECTION 9- PREPARATION INFORMATION

*This data is supplied to comply with OSHA Hazard Communication Standard 29 CFR 1910,1200 and W.H.M.I.S. CPR*

**DATE:** 09 January 2006

**REVIEWED:** 26 January 2009

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FIRE - 0                      TOXICITY - 2                      NFPA                      REACTIVITY - 1                      SPECIAL -